

WITH A REMARKABLE NEW ENGINEERING PRODUCTIVITY TOOL CALLED HiQ™, AN AEROSPACE ENGINEER CAN NOW COMPUTE THE TRAJECTORY OF A SPACE VEHICLE IN 30 MINUTES.

YET, HiQ IS FOR
ALL OF US.

Engineer, scientist, student, educator. We can all use HiQ—at any level of sophistication. From the most complex industry project to everyday academic problem solving, nothing compares with HiQ. No other productivity tool offers the phenomenal range of disciplines, depth of application, or raw computing power. *Imagine inverting a 100 x 100 matrix in 80-bit precision in less than 10 seconds. Or solving a system of 100 linear equations in 5 seconds, on your desktop.*

AND YOU ALREADY KNOW
HOW TO USE IT.

HiQ's interface is an electronic extension of the engineering "project notebook." It's easy to learn and simple to use because you already know how. The notebook paradigm lets you design and utilize specialized tools for solving your problems. Any of the notebook's data items, scalars, vectors, matrices, graphs, programs (*scripts*), etc. have an associated editor and are integrated with a common "look and feel."



programs in the world. And HiQ also gives you the flexibility to design your own tools. Imagine having the power and the ability to design and use a specialized engineering tool you've created—in a single day.

scientific graphics program (Grapher) has essentially all the features of a stand-alone program. These include a completely interactive

graphical environment permitting a variety of manipulative capabilities (e.g., viewing angle, aspect ratio, zoom in/out, color, shading, perspective/orthographic mode).

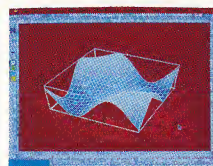
SOME OF THE TOOLS AT YOUR FINGERTIPS:

- ☞ A complete matrix and linear system analysis program
- ☞ A number of powerful equation solving capabilities
- ☞ Hundreds of mathematical and scientific functions
- ☞ Data and function integration programs
- ☞ A commercial quality differential equation solving program
- ☞ A unique integral equation solving program
- ☞ A high performance Fourier analysis program for data reduction and analysis
- ☞ A sophisticated linear and nonlinear optimization program
- ☞ An engineering boundary value problem solver package
- ☞ Numerous engineering statistical analysis capabilities
- ☞ A powerful program for finding real and complex roots and functions
- ☞ A complete interactive 2D and 3D graphical analysis program
- ☞ A full complement of digital signal processing routines
- ☞ All of the special functions of applied mathematics.



AND HiQ INCLUDES QSCRIPT™, THE FIRST 4GL FOR ENGINEERING/SCIENCE.

HiQ contains the two essential elements necessary for developing specialized engineering



programs: a powerful programming language (the first 4th generation language for engineering/science) and an extensive library of built-in functions. By constructing new permanent functions, sophisticated programs can be rapidly developed enabling dramatic 5x-10x productivity gains.

RESERVE YOUR COPY OF HiQ NOW—
AT A SPECIAL PRICE.

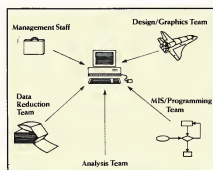
HiQ will be available on the Apple® Macintosh® II series of computers in April and soon after on the SUN® workstations. However, you can reserve a copy of the HiQ Macintosh version now at a special price of \$495. This is a 90-day limited time offer direct from Bimillennium Corporation, so act quickly. To reserve your Mac Version of HiQ at this special price call 1-800-488-8662. VISA/MasterCard/AmEx accepted.



Bimillennium

First in Power Computing Software

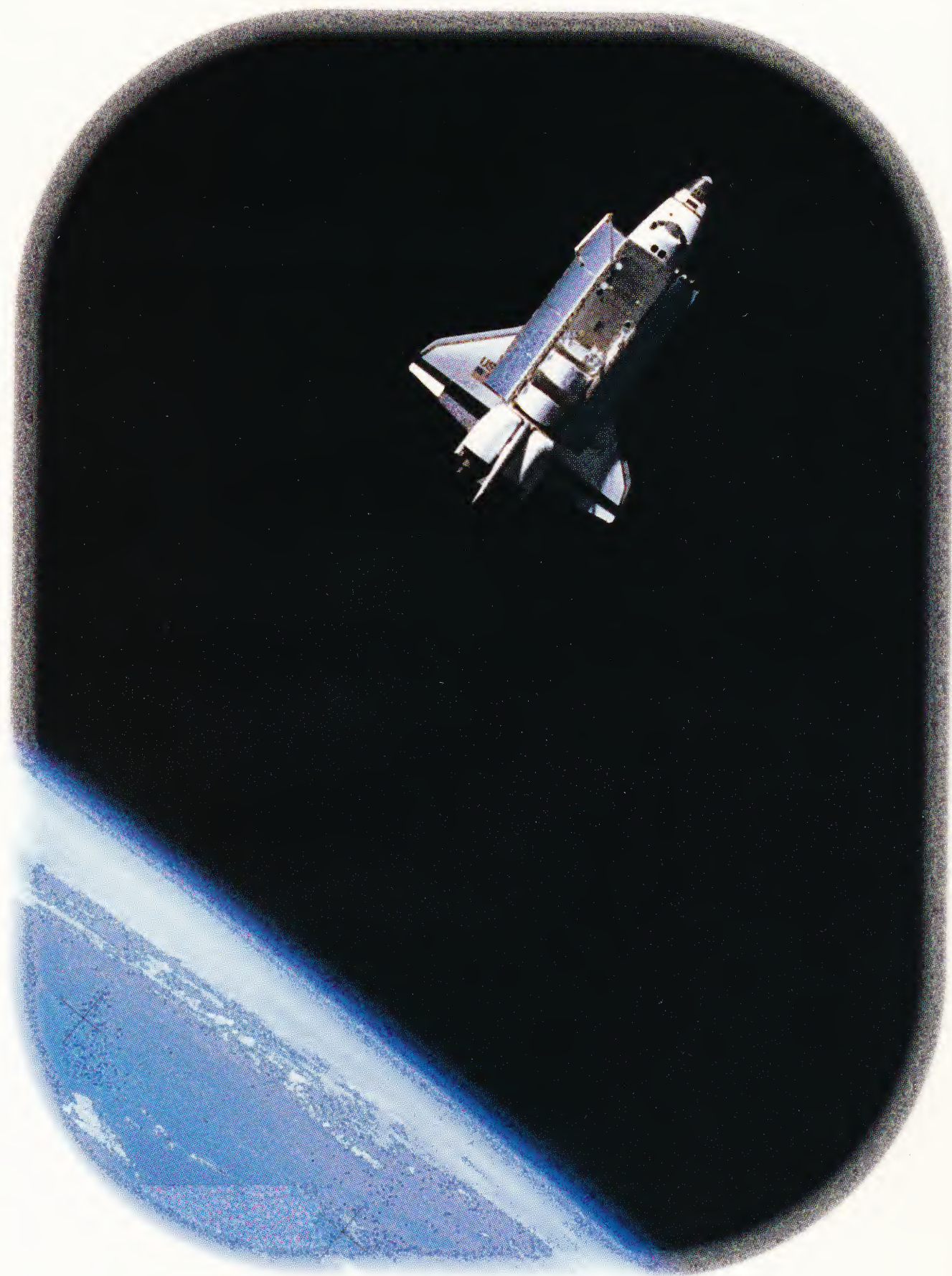
MAINFRAME POWER AND 5x-10x
PRODUCTIVITY GAINS CAN BE YOURS.



Take a deep breath and consider—HiQ has the richest and most extensive function library of any engineering program. Over five hundred robust built-in functions right at your fingertips. Features and capabilities not available in any other commercial product. Many of the most powerful microcomputer mathematics

Plus several higher level capabilities. For instance, HiQ's numerical editor enables you to determine both the structure and mathematical characteristics of any matrix of any size. The Optimizer contains linear programming, nonlinear unconstrained and constrained programs based on the best available algorithms successfully used on scientific mainframes. The Fourier and Statistical Analyzers have been developed and tested by specialists in those disciplines. And the

© 1990 Bimillennium Corporation. HiQ and QScript are trademarks of Bimillennium Corporation. All other registered trademarks are those of their respective companies. NASA photo





Bimillennium

First in Power Computing Software

Seeking to fill the void for advanced engineering and scientific workstation software, Bimillennium Corporation was founded in order to develop, support, and market "power computing" software products that take full advantage of current and emerging high performance workstation potential.

As a commitment to the needs of the engineering and scientific community, Bimillennium has established the standards for all power computing software as: high performance computing power, user-friendly interfaces, and integrated solutions. Given these elements, the productivity of a user is greatly increased.

POWER COMPUTING SOFTWARE

Bimillennium's development team understands the *real world* needs of engineers and scientists. They produce uniquely designed analysis systems that are extremely powerful and very easy to learn, allowing users to solve sophisticated problems across a broad range of disciplines.

Bimillennium's software is an ideal solution for physical scientists, applied mathematicians, civil, mechanical, electronic, automotive, electrical and aeronautical engineers, as well as university educators and students, among other technical professionals.

MANAGEMENT TEAM

Bimillennium is directed by the experienced executive management team of: President and Chief Executive Officer John C. Cavalier, Executive Vice Presidents Dr. David M. Russell and Lawrence W. McGraw, who serve as Chief Technical Officer and the Head of Sales and Marketing, respectively, and Vice President and Chief Financial Officer Phillip ErkenBrack. Industry recognized consultant, author, and lecturer Dr. James Martin is a major investor and serves as Chairman of the Board.

FAMILY OF PRODUCTS

Bimillennium's commitment to a continuing family of power computing products includes the development of six products over the next three years. These can be categorized into the application families of: Engineering Analysis; Engineering Development Tools; Numerical and Symbolic Mathematics; and Compilers for Engineering and Science. The first of these products will be available in spring 1991.

Bimillennium's software products are available through the company's telemarketing department and direct sales force.

For more information about products or the company,

call 1-800-488-8662, or write to:

***Bimillennium Corporation Public Relations
101 Albright Way, Los Gatos, CA 95030***

HiQ

The first completely integrated software analysis system providing end-to-end solutions to real world problems in many areas of engineering, mathematics, and the applied sciences.

INTEGRATED MATHEMATICS AND GRAPHICS CAPABILITIES

You can quickly solve complicated problems or manage the data, analysis methods, and results of a large and lengthy project with HiQ's integrated Function Library, Problem Solvers and Grapher.

UNIQUE INTERFACE

HiQ's interface is an electronically-based extension of the classical engineering notebook called the "project notebook". The Project Notebook was designed to emulate a real-life three ring binder which consists of pages (separated by tabbed sections), a table of contents, glossaries, indices, and many other organizational features. The notebook paradigm allows you to design and use specialized tools for solving engineering problems.

The HiQ Notebook is dynamic. In addition to containing the data (scalars, vectors, and matrices), graphs (2D and 3D), QScript programs, annotated text, and Problem Solver solutions, all of this data can be manipulated via custom designed editors. It can be deleted or added at any time, and can be shared between notebooks or users across a network. Furthermore, there are powerful built-in facilities for locating the data, analyzing the structure of the data, and filtering the data for numerical information.

Bimillennium Corporation

101 Albright Way, Los Gatos, CA 95030
(800) 488-8662 (408) 866-2010

At a Glance

FUNCTION LIBRARY

The most extensive library of any engineering program

HiQ contains over 500 built-in functions covering dozens of engineering and scientific application areas. Included are:

- Trigonometric Functions
- Transcendental Functions
- Orthogonal Polynomials
- Special Functions
- Integral Functions
- Integral Formal Functions
- Derivative Formula Functions
- Polynomial Functions
- Series Functions
- Numerical Functions
- Geometric Functions
- Basic Matrix Functions
- Special Matrix Functions
- Matrix Structure Functions
- Eigenvalue Functions
- Fourier Analysis Functions
- Business Functions
- Statistical Analysis Functions

PROBLEM SOLVERS

The HiQ Solution for "Everyday Problems"

HiQ's Problem Solvers are a combination of over one hundred extremely sophisticated mathematical algorithms. These are implemented with a common graphical user interface that automatically generates a script which is used to solve a problem. This script may be incorporated into a larger script using any of the other user-defined or built-in functions. The categories of Problem Solvers are:

- Expression Evaluator
- Nonlinear System Solver
- Integrator
- ODE - Initial Value Problem Solver
- ODE - Boundary Value Problem Solver
- Integral Equation Solver
- Optimizer
- Root Solver
- Fourier Analyzer
- Statistical Analyzer

GRAPHER

Interactive scientific graphics capability

The Grapher is a 2D and 3D real-time interactive graphics program which has extensive functionality and is as complete as any stand-alone scientific graphics program. Data can be dynamically linked throughout the notebook and represented in many different formats. Some of the features of the Grapher are:

- Arbitrary mapping of data dimensions to display dimensions
- Multiple coordinate systems for display space
- Various scaling methods for coordinate axes of display space
- Multiple display formats
- Multiple view parameters
- Multiple rendering modes
- Animation: making and showing graphical movies
- Output formats:
 - Interactive graphics
 - High resolution printing

QSCRIPT

The first 4th Generation Language for engineering and science

QScript is an object-based scripting language specifically tailored for engineers, scientists, and applied mathematicians. Although it's a complete programming language, you are not required to learn most of the typically difficult parts of a new language, such as data typing, input/output, and other formatting statements.

QScript is a flexible environment in which Problem Solvers, built-in functions, and user-defined functions can be utilized for designing and implementing any kind of specialized engineering tool.

System Requirements

Apple Macintosh:

- 2 MB RAM
- SE/30
- Macintosh II, IIfx, or IIsi with coprocessor

Sun Workstations:

- Sun-4
- Sun-3
- Any system with OpenWindows